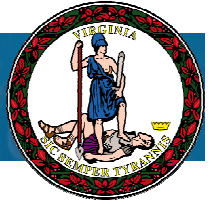


STATUS OF 800 MHZ REBANDING IN THE COMMONWEALTH

800 MHz Rebanding & Lessons Learned



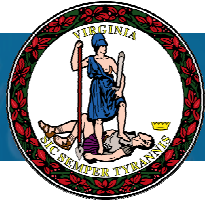
Panelists



- *David Warner, VITA Telecommunications Engineer*
- *David “Duff” Barney, Fairfax County Branch Chief of Emergency Communications*
- *Doug Onhaizer, Virginia Beach Communications Administrator*



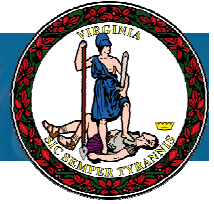
Agenda



- Background & 2007 Strategic Plan Initiative
- Status of 800 MHz Rebanding-VITA
- Lessons Learned-Fairfax County
- Lessons Learned-Hampton Roads
- Questions and Answers



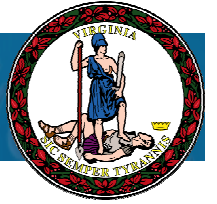
FY 2006 Efforts: Background



- The CICO worked with VITA to understand, coordinate and support the regions in their rebanding efforts
- Provided venues allowing information exchange between the IAT participants regarding their experiences with rebanding efforts
- IAT identified the roadblocks in the process
- Identified support the Commonwealth could provide to streamline the rebanding process allowing public safety to remain up and running

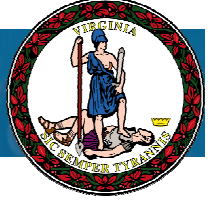


FY 2007 Initiative



2007 Strategic Plan Initiative 8:

“Continue to support and facilitate the 800 MHz rebanding effort within the Commonwealth”

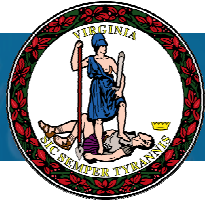


Status of 800 MHz Rebanding

David Warner
*Virginia Information Technology
Agency
Telecommunications Engineer*



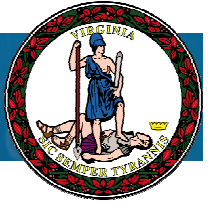
The Status of Rebanding



- As part of the SIEC Initiative Action Team:
 - The Virginia Information Technologies Agency (VITA) & the Interoperability Coordinator's office wanted to take a snapshot on the health of the Commonwealth as it pertains to the 800 MHz rebanding process.



What were the core objectives?

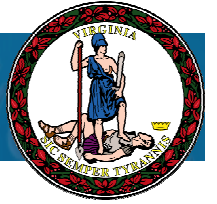


- 1. Determine who was effected?
- 2. Find out how far along they were within the process
- 3. Identify areas or regions of concern.
- 4. Help our customers—that is the cities, towns, counties and state government agencies.
- The question was also asked, is there some type of high level assistance that the state could provide to help aid the process.





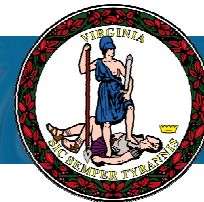
The Status of Rebanding



- We knew that this would be a large undertaking, but we use the core objectives as the base line.
- VITA made calls to known contacts and ask them how the rebanding efforts were coming
- Good realistic snapshot on the rebanding progress and a glimpse of the shape of things to come.
- Added value was accomplished.



The Status of Rebanding



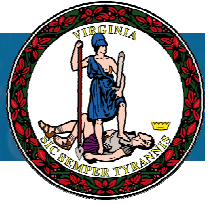
- Although these were good faith attempts to do this, VITA recognized that there were some serious gaps that needed to be bridged.
- The APCO East Coast Conference was used to narrow and close the gaps, by spreading the word of what was being done and obtain real time feedback.
- The objective was good in concept, however, we still had some funding and larger information structure problems.



2006
Virginia
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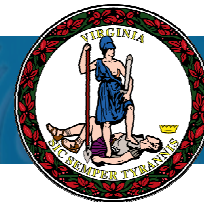
The Status of Rebanding



- As we were into the negotiation period for the NPSPAC move, we knew that we had to find some solid solutions to get the information we needed and quick.
- By this time, the Virginia State Police also had some critical needs.



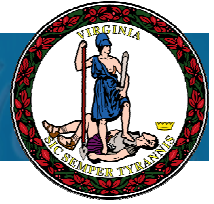
The Status of Rebanding



- As a result, a scope of work was developed for this effort.
- We were looking for a mid to high level scope of work.



The Status of Rebanding

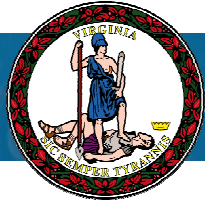


The outline consisted of the following essentials:

1. Prepare a list of all 800 MHz radio users (both state and local) in the Commonwealth:
 - A. Those that are affected by Wave 1 rebanding
 - B. Those that are not
2. Establish a status and relationship as it pertains to rebanding
3. Expand a listing of remaining 800 users and determine why they are not effected by the retune
4. Sort out state agencies using 800 and what their dependencies are.--Are they independent or dependent 800 systems?
5. Develop an outline and format a report using the gathered info. Take the info and output items such as:
 - A. RFPF—Request For Planning Funding
 - B. Common issues that all entities share
 - C. List those entities that have completed rebanding
 - D. Flag those entities that are behind—Why? (For the purpose of providing state assistance)



The Status of Rebanding

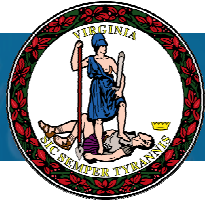


- Next came the tough part—matching our scope of work with the most suitable party or individual.
- Within the matching process we looked at the following list of criteria:
 - » Are they fully cognizant of the issue?
 - » Do they understand the objectives?
 - » Do they know what the outcome should be?
 - » Is the philosophy of the consultant conducive or non-conducive to the time table and objectives?
 - » Will or does your intended outcome & their outcome—direction converge or diverge?
 - » How does what we do effect our customers? helping or hindering?





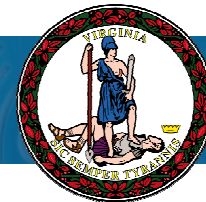
The Status of Rebanding



- After evaluating the criteria, we examined our state contracts to see if we had a match in reference to our criteria and expectations.
- CTA was selected



The Status of Rebanding



Summary of our findings to date:

Printed: 04/28/2006

300 MHz Licenses in Virginia - PRELIMINARY

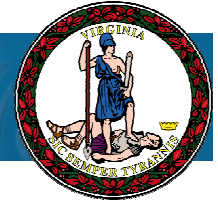
FCC Data as of 28 August 2006

VITA Action	Region Number	Frequency Planning (FPA) Status	Frequency Coordination Agreement (FCA) Status	Registration Complete	Schedule Status - M Dec 2006 Issues and Status	Regional or other (Interoperability)	Notes	1-128 Channel used	Intermodulation Potential	MSB/C	Has Rebanded License (S/E or T/D)	Entity	Telephone	Contact	IRM
Name	7	Negotiation with SSI				Chatham County, GA, Chatham County, GA						Albemarle County of	(434) 86-1100	Wayne Carpenter	0000020420
Name	1	Negotiation with SSI				National Capital Region (NCR)						Novato, City of	(702) 838-6258	Dale Johnson	0000020420
Name	4	Stalled FPA	Under Negotiation with SSI	Est. end of 2006, February 2007 at latest		Allegheny County, Chatham County, Shenandoah County, Shenandoah County	Intermodulation Potential					Allegheny County of	(410) 863-6000	Ryan D. Mullenbach	0000020420
Name	4	Stalled FPA	Under Negotiation with SSI	Est. end of 2006, February 2007 at latest		Central Virginia Planning District						Arden, County of	(434) 86-9000	Gary Stokes	0000020420
Name	1		Under Negotiation with SSI			National Capital Region (NCR)						Arden, County of	(702) 218-8000	Lisa Thompson	0000020420
												Blackburg, Town of	(410) 863-1818	William D. Dwyer	0000020420
Name	2	Under Negotiation with SSI				Henrico County						Capital Region Airport Construction	(800) 226-2801	Don Vengone - FCC Consultant - Domestic Aeronautics	0000020420
Name	4	Stalled FPA	Under Negotiation with SSI	Est. end of 2006, February 2007 at latest		Central Virginia Planning District						Central Virginia Planning District Coordinator	(410) 863-6000	Central VA Radio Comm. Unit - John Carroll	0000020420
Name	3	Negotiation with SSI		Est. end of 2006		Tidewater						Chesapeake, City of	(410) 302-6000	Barbara Hensley - Tidewater/Consultant	0000020420
Name	2	ST1 - Signed FPA ST2 - FPA in Progress with SSI	ST1 - Signed FPA	ST1 - Est. October 2006		Henrico County, City of Richmond and City of Colonial Heights					ST1	Chesapeake, County of	(800) 448-1200	Don Dwyer - FCC Consultant - Domestic Aeronautics	0000020420
Name	4	Stalled FPA	Under Negotiation with SSI	Est. end of 2006, February 2007 at latest		Allegheny County, Chatham County, Shenandoah County, Shenandoah County	Intermodulation Potential					Chatham County, Town of	(410) 863-2000	Chief Gary Stokes	0000020420
Name	2	Stalled FPA	See Chesapeake County	See Chesapeake County		Henrico County, City of Richmond and City of Colonial Heights	Intermodulation Potential				ST1	Colonial Heights, City of	(800) 448-1200	Linda Archibald - FCC Consultant - Domestic Aeronautics	0000020420
Name		STAYED IN EXPANSION HAND					Rebanding not required				MA	Concord, City of	(410) 863-6000	U. Fournier - Chief Draughtsman	0000020420
Name	1	Under Negotiation with SSI				National Capital Region (NCR)						Culpeper, County of	(410) 863-6000	Alan Culpeper, Dir. of Procurement	0000020420
	1	ST1 - Signed FPA ST2 - Signed FPA				National Capital Region (NCR)						Fairfax, County of	(702) 863-1000	Radio Services Center	0000020420
Name	3	Stalled FPA	Under Negotiation with SSI	Est. end of 2006		Tidewater						Hampton, City of	(702) 863-6000	Jim Crenshaw - Allegheny County Data 200-20-0000	0000020420
License updates regarding Change TIA has made	2	Stalled FPA	Under Negotiation with SSI	Est. end of 2006		Henrico County, City of Richmond and City of Colonial Heights						Henrico, County of	(800) 300-0100	Phil Hensley - FCC Consultant & MA-Care	0000020420
Name		Stalled FPA	Stalled FPA		On Schedule		Has MA-Care system					Harrisonburg, City of, Harrisonburg Radio/Television Area Council	(410) 863-2000	James L. Jenkins	0000020420
Name	2	ST1 - Signed FPA ST2 - Under Negotiation with SSI	ST1 - Signed FPA ST2 - Under Negotiation with SSI	Only to implement changes due to lower antenna structural restrictions		Henrico County, City of Richmond and City of Colonial Heights	Intermodulation Potential					Henrico, County of	(800) 448-1200	Paul Fournier - FCC Consultant - Domestic Aeronautics	0000020420
Thank VITA for interest	2	Stalled FPA	Under Negotiation with SSI	Make date at this time		Chatham County, Chatham County, Shenandoah County, Shenandoah County	Intermodulation Potential					Hopewell, City of	(800) 448-1200	Henry Roberts - Dale Roberts (Consultant) (800) 448-1200 & Central VA Unit Vap	0000020420

Page 1 of 3



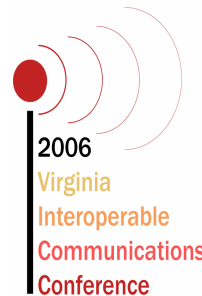
The Status of Rebanding



	1-120 Channel User	Interleaved / Expansion Band User	NPSPAC User
In RFPP Process		Chesterfield Colonial Heights Henrico	Henrico City of Richmond Capital Region Airport Commission
Signed PFA	Chesterfield Colonial Heights Henrico City of Richmond	Hanover	Hanover
In FRA Process	City of Richmond	Hanover Hopewell	Hanover Hopewell
Signed FRA	Chesterfield Colonial Heights Henrico		
Completed Rebanding			

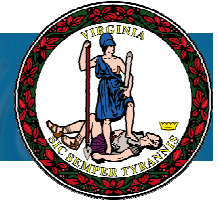
Richmond Metro Area

www.interoperability.virginia.gov





The Status of Rebanding



	1-120 Channel User	Interleaved / Expansion Band User	NPSPAC User
In RFPF Process		Newport News Suffolk	Newport News Chesapeake York
Signed PFA	Newport News Norfolk Virginia Beach	Virginia Beach Portsmouth **	Virginia Beach Portsmouth**
In FRA Process	Virginia Beach	Norfolk Hampton	Norfolk Hampton
Signed FRA	Newport News Norfolk Suffolk		
Completed Rebanding	Newport News Norfolk		

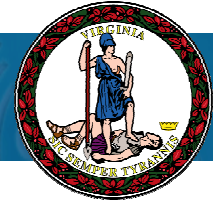
Tidewater Area

www.interoperability.virginia.gov





The Status of Rebanding



	1-120 Channel User	Interleaved / Expansion Band User	NPSPAC User
In RFPF Process		Alexandria	Alexandria Culpepper Loudoun Manassas Prince William County Warrenton - Fauquier
Signed PFA	Fairfax	Fairfax	Fairfax Metro Washington COG
In FRA Process		Arlington	Arlington
Signed FRA			
Completed Rebanding			

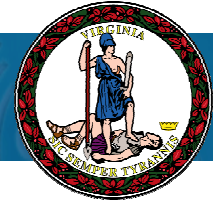
Northern Virginia Area

www.interoperability.virginia.gov





The Status of Rebanding

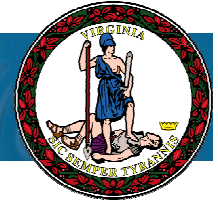


	1-120 Channel User	Interleaved / Expansion Band User	NPSPAC User
In RFPF Process		Albemarle County (with Charlottesville UVA Charlottesville Airport)	Albemarle County (with Charlottesville UVA Charlottesville Airport)
Signed PFA			
In FRA Process			
Signed FRA			
Completed Rebanding			

Charlottesville / Albemarle County



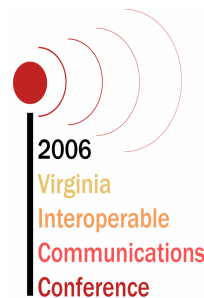
The Status of Rebanding



	1-120 Channel User	Interleaved / Expansion Band User	NPSPAC User
In RFPF Process			
Signed PFA (at TA for final approval)		Amherst County Central Virginia Planning District Commission	Lynchburg
In FRA Process			
Signed FRA			
Completed Rebanding			

Central Virginia Planning Area

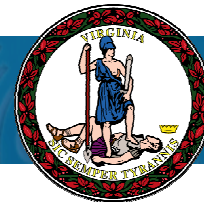
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The Status of Rebanding



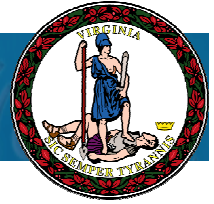
	1-120 Channel User	Interleaved / Expansion Band User	NPSPAC User
In RFPF Process		Roanoke City Roanoke County	Roanoke City
Signed PFA	Roanoke County		
In FRA Process			
Signed FRA	Roanoke County		
Completed Rebanding			

Roanoke Valley





The Status of Rebanding

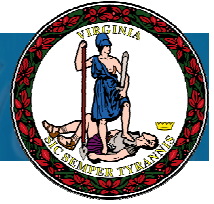


	1-120 Channel User	Interleaved / Expansion Band User	NPSPAC User
In RFPF Processes			
Signed PFA (at TA for final approval)			Commonwealth of Virginia (VSP)
In FRA Processes			
Signed FRA			Harrisonburg - HRECC
Completed Rebanding			

Harrisonburg/Rockingham & Virginia State Police



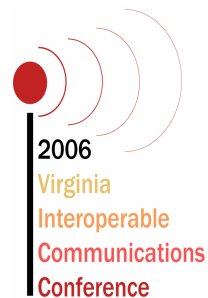
The Status of Rebanding



	1-120 Channel User	Interleaved / Expansion Band User	NPSAC User
In RFPF Process			
Signed PFA			
In FRA Process		Alleghany County Clifton Forge Sharon Vol. FD	
Signed FRA			
Completed Rebanding			

Alleghany / Western Virginia

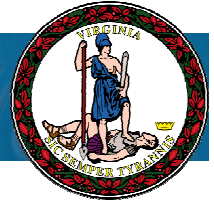
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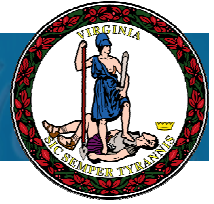
The Status of Rebanding



- The following seven (7) localities / agencies have elected to stay in the interleaved / expansion band, and thus are not affected by Wave 1 rebanding:
- City of Covington
- Commonwealth of Virginia, Correctional Facilities
- Commonwealth of Virginia, Northern Virginia Community College
- Commonwealth of Virginia, Old Dominion University
- Commonwealth of Virginia, George Mason University
- Commonwealth of Virginia, Virginia Tech
- Commonwealth of Virginia, State Corporation Commission



The Status of Rebanding



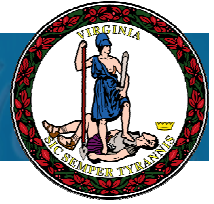
- State Agencies on Locality 800 MHz Systems
- One element of this survey was to collect data as to which state agencies are using locality systems. At the time this initial survey was conducted, most localities were immediately before the planning phase and their exact data were not available. It appears most localities who have provided radios to state agencies radios, have accounted for these radios in their negotiations, as they own the equipment. **If the radios used by the state agencies on the locality system are the agencies' own radios, then this is a concern.** This information will be captured in the next revision of this report.



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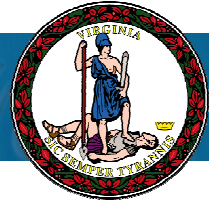
The Status of Rebanding



- **Common issues that were provided by the localities/agencies:**
- **Overall, negotiations with S/N are in a vacuum.** It seems S/N is attempting to hold localities to a standard or predetermined idea of how much time and effort should be expended for that locality to reband. S/N continually makes statements along the lines of “that’s not a typical effort”, “this is more than usually necessary” and other general statements. These statements and references appear are based on S/N experience negotiation with other localities or predetermined amounts, which the locality is not privy to.
- The negotiation process is very long and drawn out. It is a large, taxing effort on **some localities that do not have sufficient personnel resources or funding.**
- **When in negotiations, some localities are using the assistance of the City or County attorney and do not have someone who has extensive FCC License knowledge on their side.**
- Complexity of the forms required by the TA as well as the number of changes and revisions to these forms has caused additional effort in many cases.
- Mediators are assigned as third parties who do not have any relationship to either the locality or S/N. However, in some cases **it appears that the mediator does not have a strong knowledge of rebanding**, standard mobile radio communications practices or industry perspective which would aid in the overall process.
- **Vendors getting paid??**



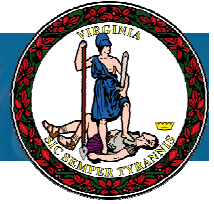
The Status of Rebanding



- Administration and the overall process for negotiation and funding is complex and can require significant work. The basic funding request started as a simple single page form. Over the last 18 months of rebanding this form has evolved into a 14 page word template. Completing this form requires significant work including carefully reading the 19 pages of instructions. Except for the least complex systems, many licensees have engaged consultants simply based on the Request for Planning Funding (FRPF) form. As the rebanding process matures, the pace of the TA form changes has slowed, but the complexity endures.
- **Negotiating with Sprint-Nextel (SN) can be problematic**, particularly if both an equipment vendor and an engineering consultant are involved in the rebanding process with the licensee. **SN sees the involvement of third parties as offering the potential for profiteering and enrichment**[\[1\]](#).
- [\[1\]](#) See the September 2006 edition of ***Mission Critical Communications*** the Public Safety Report, page 74, interview with Lawrence Krevor, Vice President of government affairs for Sprint Nextel
- **Remember your agency needs to consistently model the ‘good faith effort’ so as to avoid accusation if your case goes to the FCC.**



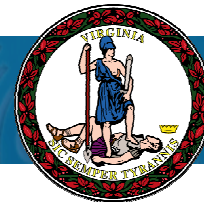
The Status of Rebanding



- **Recent Changes:**
- On 20 September 2006, Sprint-Nextel proposed 2 year rebanding freeze to the FCC. The rationale for this change is to allow public safety agencies to plan for rebanding. Since this proposal is new, the responses are just beginning however; APCO has indicated their disappointment with the basis of the Sprint Nextel request. At this point it is unclear what position the FCC may take on this issue. On 26 September 2006, the FCC also announced the formation of the Public Safety and Homeland Security Bureau. How this new organization will face the challenge of rebanding is yet unknown.



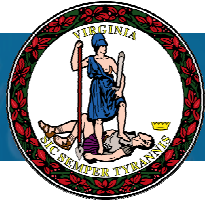
The Status of Rebanding



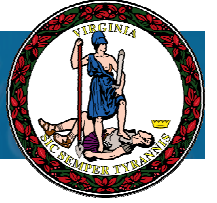
- Where do we go from here?
- The resounding message—if you still need assistance, we are here.—The Commonwealth wants to make certain that you get through the rebanding process.
- We are not going to tell you what to do, rather listen and take a facilitating approach.
- You know your issues and playing field—if there is something that we can do to help make that field goal or TD we are here—especially if the score can prevent overtime & sudden death.



The Status of Rebanding



- If nothing else, let us (CTA) know your progress.
- Here is the number to call:
CTA/Rebecca Saunders—434-239-9200
rsaunders@ctacommunications.com

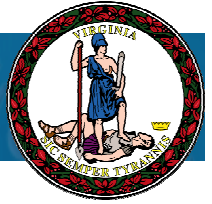


800 MHz Rebanding: Lessons Learned for Public Safety Licensees

David “Duff” Barney
Branch Chief, Emergency Communications
Fairfax County Department of Information Technology



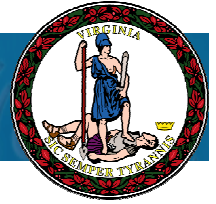
Fairfax County Public Safety



- Motorola ASTRO 3.0 mixed mode analog/digital, 11 simulcast sites, 20 channels, 9 Lower-120 frequencies
- Motorola Smartnet NPSPAC 7 site 20 channel “Public Service” analog simulcast system
- Approximately 11,000 total subscriber radios
- Extensive daily mutual aid and interoperable communications with other jurisdictions in the National Capital Region using direct system access (“Level 5”)



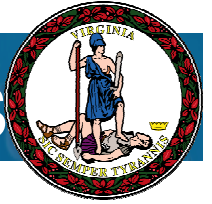
Fairfax Rebanding Status



- In mediation since 12/26/05
- Directed to seek planning funding by TA Mediator
- PFA negotiations with Nextel started 1/2/06, ended 4/19/06, PFA final execution on 7/17/06
- Motorola POE contract executed 8/10/06, POE activities started 9/25/06, expected duration 4.6 months
- Executed FRA due by 3/31/07

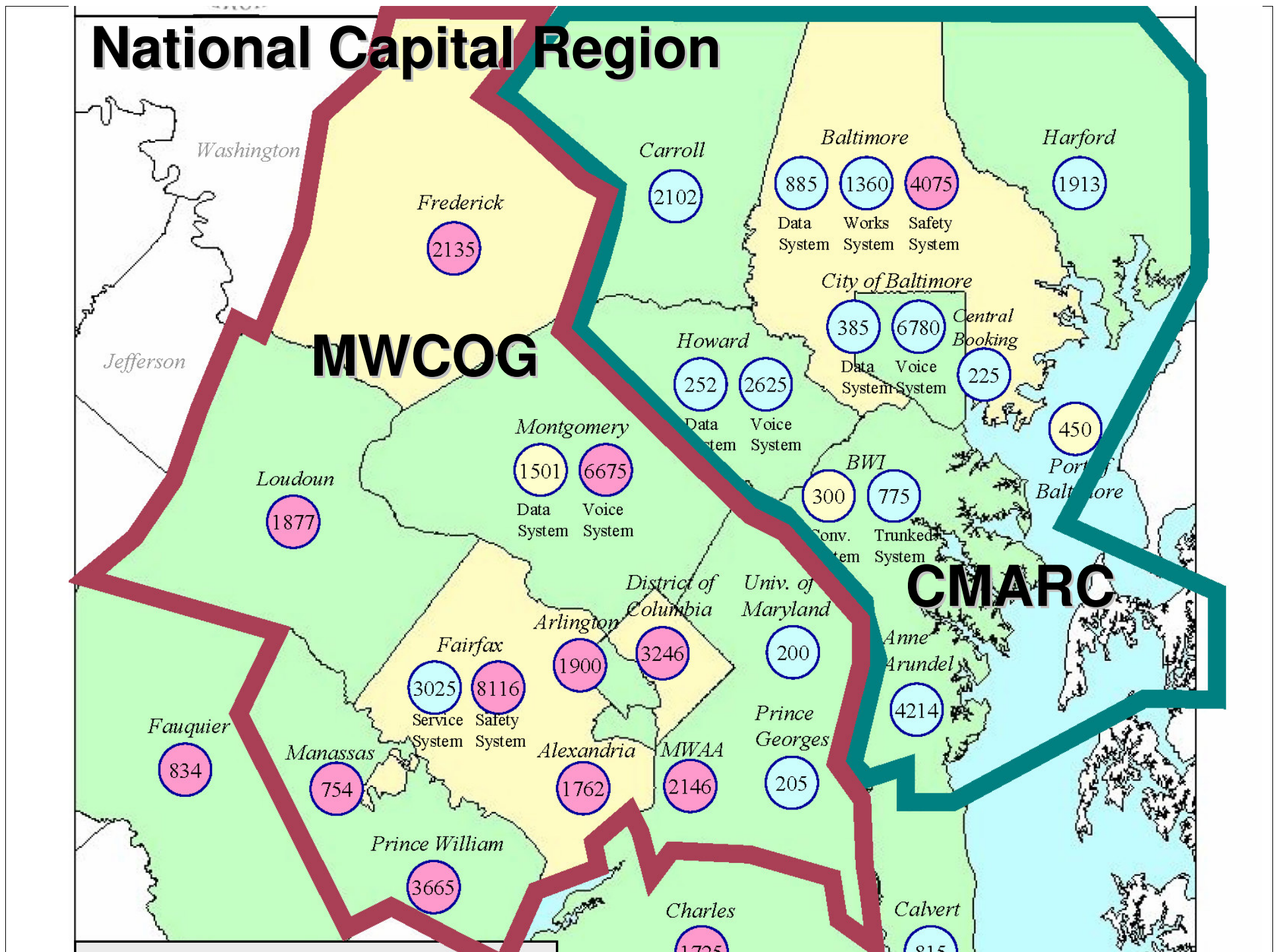


NCR Regional Coordination Status



- National Capital Region has extensive interoperability via direct system access
- TA and Nextel understand the unique interoperability environment in the NCR
- A need for regional project oversight by Motorola has been identified
 - Ensures coordination of Motorola resources to mitigate risk and improve efficiency of rebanding process
- Currently defining the scope and role of centralized Motorola project management

National Capital Region



MOTOROLA

Regional
Project/Resource
Management

Regional Activity Support

Regional Direction, Administration
and Oversight by MWCOG

Sprint-NEXTEL



Transition
Administrator

The Official Reconfiguration Manager



MWCOG

Status/Feedback

Status/Feedback

Non-COG 800
MHz Licensees

*Individual
Contracts with
Motorola*

Individual Licensee Direction
and Oversight

*Represented by
MWCOG
Contract*

COG 800 MHz
Licensees

Individual Licensee Direction
and Oversight

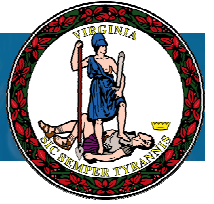
Individual Motorola
Rebanding Teams

Motorola Project Direction
and Oversight

Individual Motorola
Rebanding Teams



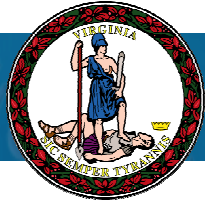
Some Lessons Learned



- Consider hiring outside FCC and commercial counsel
 - Rebanding workload may very well be more than your internal legal staff can handle
 - Rebanding involves a complex commercial negotiation process that typically takes the form of intense “bargaining” with multiple iterations of offers and counteroffers
 - An FCC attorney is needed who is intimately familiar with the 02-55 proceeding and knows the licensee’s rights and responsibilities
 - A commercial attorney is needed to manage the negotiation process and maintain an impeccable record of the negotiations – this will be needed in mediation or court
- Once you enter mediation, you are in a litigation with Nextel



Some Lessons Learned

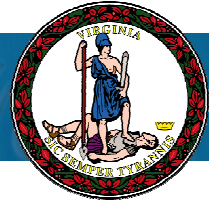


- Exercise care and prudence in communications related to rebanding
 - All contract documents must be read thoroughly and understood - watch out for seemingly minor contract provisions
 - Seek legal guidance for document and communications management
 - Do not take any conversation or communication with Sprint-Nextel as casual or off the record





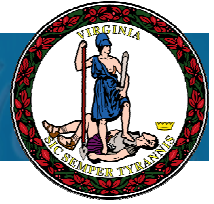
Some Lessons Learned



- During negotiations and mediation, many disputes will arise regarding “reasonable” costs
 - There will be concentration on “duplication of effort” between internal staff, vendor staff and consultants
 - Where internal/consultant and vendor resources are involved on the same tasks, be sure to provide a detailed description of their individual roles for execution of that task
 - There will be a concentration on staff, effort and equipment viewed as in excess of the minimum required for a licensee to properly reband
 - What does “reasonable” mean?



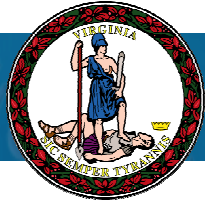
Some Lessons Learned



- Rebanding will likely take far longer than 36 months to complete, especially in areas with complex interoperability relationships
 - Our regional project plan and schedule estimates completion of all channel retuning related tasks in March 2011
 - This is based on estimated task durations for each individual licensee, many of which are worst-case estimates
 - Some improvement in the schedule is likely, but only if things go very well
- Make certain your FCC licenses are in order
 - Nextel may be reluctant to fund reconfiguration of systems that are not properly licensed, operating with expired STAs, etc.
- Communicate and coordinate closely with your interop partners



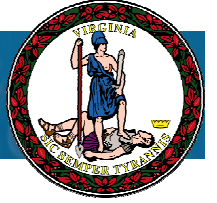
“The Promise of Rebanding”



From the www.consensusplan.org web site, late 2005

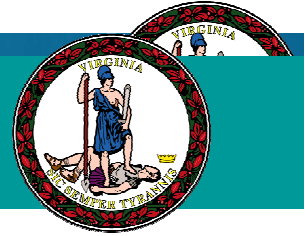
“Nextel will fund all reasonable costs related to the reconfiguration of affected 800 MHz licensees. Each affected incumbent has the option of having Nextel issue payment before or after the reconfiguration process takes place. Reasonable costs include:

- All labor associated with reprogramming your system and your units.
- Any necessary software changes.
- Legal, engineering, consulting and project management costs.
- Comparable replacement equipment for older radios and repeaters which cannot be retuned.
- Internal staff costs for work-hours directly involved in retuning.”



800 MHz Rebanding: Lessons Learned

Doug Onhaizer
Communications Administrator
City of Virginia Beach

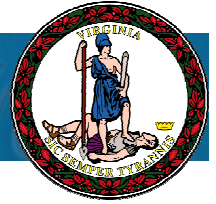


Virginia Beach Rebanding

Local and Regional Considerations and Progress



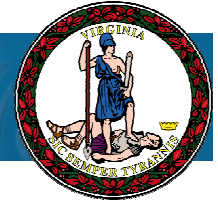
Virginia Beach



- Wave 1 – Phase 1 (1-120 - 851-854)
 - 3 Data Channels – 5 Sites
 - 851.8625
 - 851.8875
 - 853.9625
 - 520 Subscribers
 - 3 Talk Around Channels
 - 851.4125 PD
 - 852.4125 FD
 - 853.4875 MISC (mobile only)
 - 1 Secure Repeater
 - 851.0375
- Wave 1 – Phase 2 (NPSPAC - 866-869)
 - 32 Voice Channels – 5 Sites
 - 5000+ Subscribers
 - 2 NSPAC Repeaters



Current Status



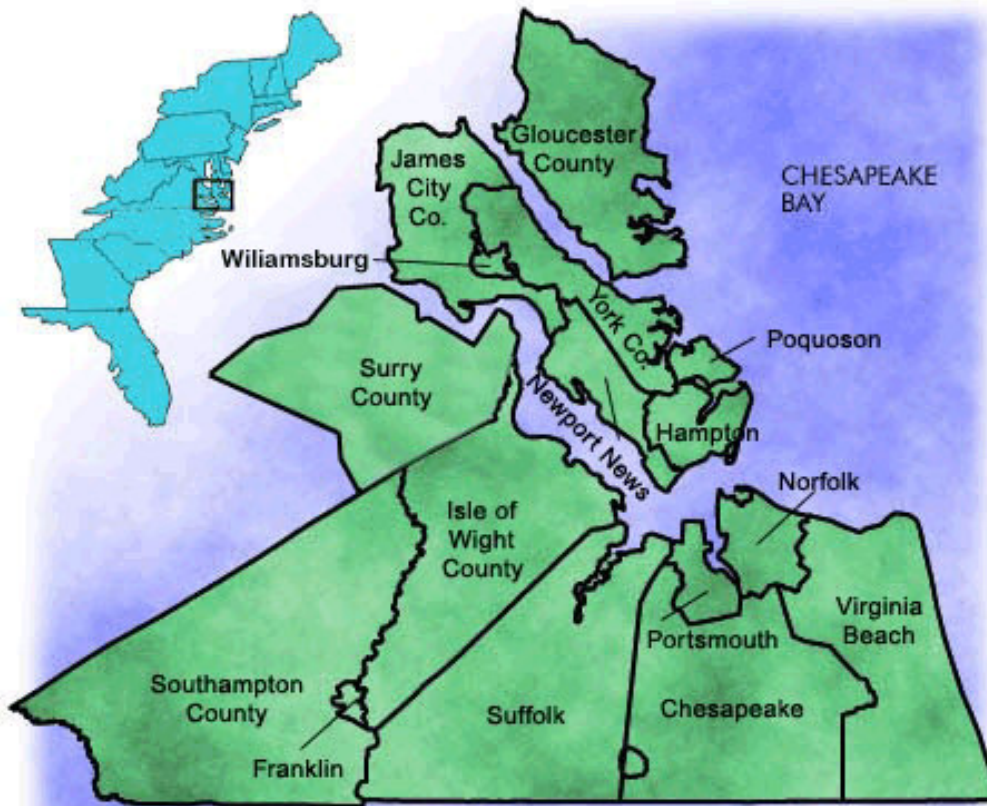
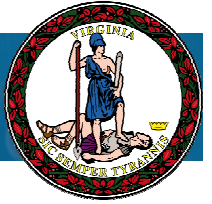
WAVE 1	PFA Deadline	Voluntary Negotiation	End Voluntary Negotiation	Start Mandatory Negotiation	End Mandatory Negotiation
Channels 1-120		27-Jun-05	26-Sep-05	27-Sep-05	26-Dec-05
NPSPAC	17-Jul-06	1-Feb-06	20-Apr-06	1-May-06	31-Oct-06

Va. Beach Status	PFA Deadline	Voluntary Negotiation	End Voluntary Negotiation	Start Mandatory Negotiation	End Mandatory Negotiation
Channels 1-120	Completed March 9, 2006	Completed	Completed	Completed	FRA Executed Awaiting Receipt
NPSPAC	Completed March 9, 2006	Completed	Completed	Awaiting Vendor Proposals from Planning	Pending

Note: Regional Coordination Amendment for PFA was executed September 1, 2006



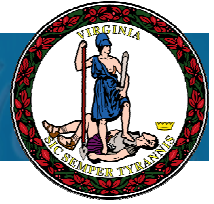
Hampton Roads Regional Rebanding



- Chesapeake
- Hampton
- York/James City County
- Newport News
- Norfolk
- Portsmouth
- Suffolk
- Virginia Beach
- York County



Hampton Roads Regional Rebanding



City/County	Manufacturer	Analog/ Digital	Trunked / Conventional	Number of Tower s	Number of Subscribe r Units	Channels
Chesapeake	Motorola (SmartNet II)	Both	Trunked	5	2,300	18
City of Virginia Beach	Motorola (SmartNet II)	Analog	Trunked	5	5,200	32
Hampton	M/A-Com (EDACS)	Analog	Trunked	6	2,000	14
York/James City County	Motorola (P25)	Digital	Trunked	5	2,000	19
Newport News	Motorola (SmartNet II)	Analog	Trunked	6	3,300	17
Norfolk	Motorola (SmartNet II)	Analog	Trunked	3	2,800	15
Portsmouth	Motorola (SmartNet II)	Analog	Trunked	2	1,300	10
Suffolk	Motorola (SmartNet II)	Analog	Trunked	3	1,200	10

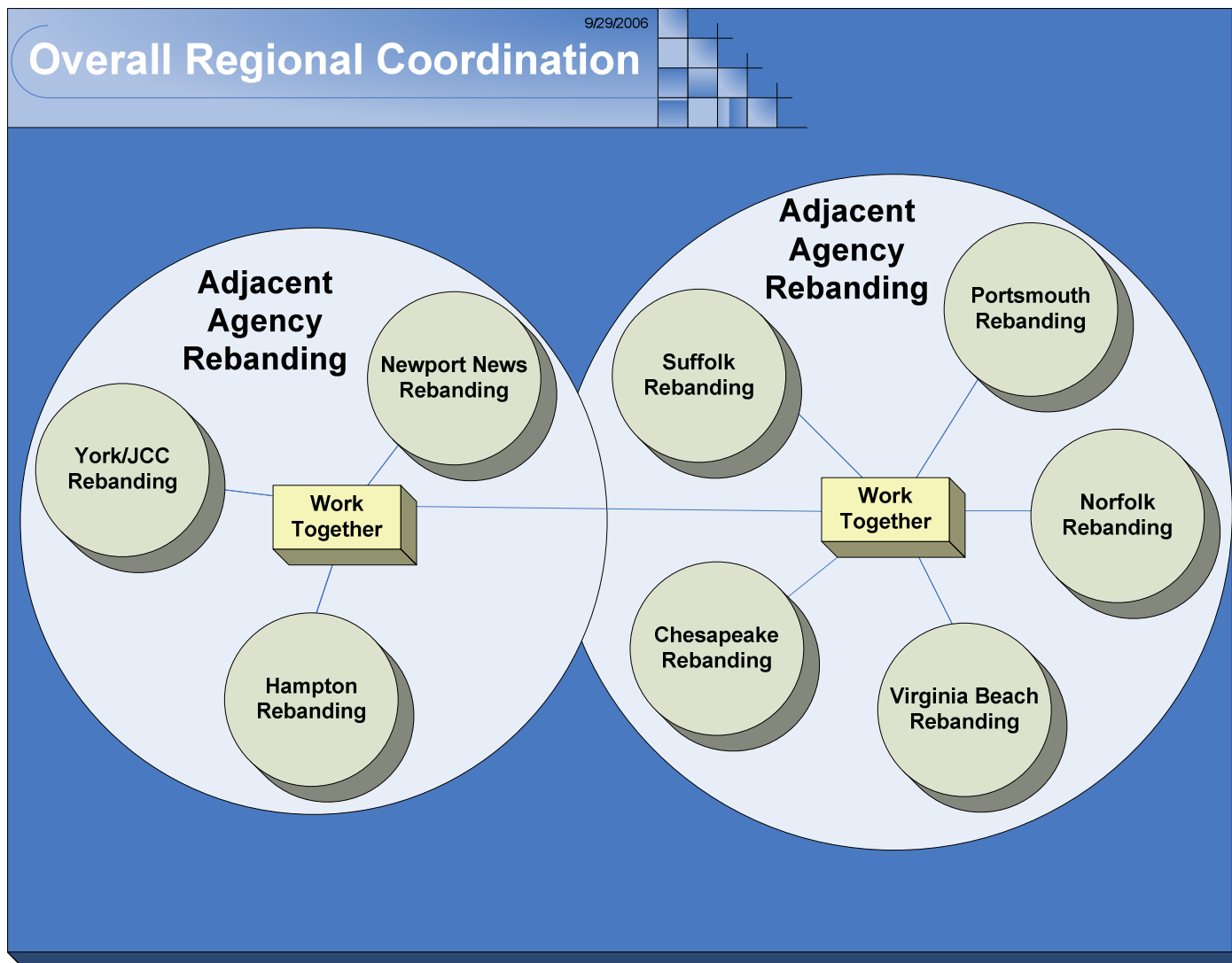
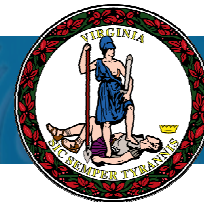
Over 20,000 Subscribers and over 35 sites to reconfigure!



www.interoperability.virginia.gov



Hampton Roads Regional Rebanding



Agency Specific

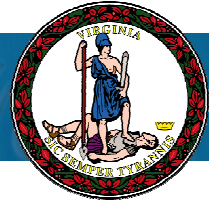
Adjacent Specific

Region Specific





Regional Rebanding Considerations

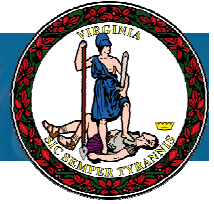


- Reconfiguration support of interoperability and mutual-aid channels by each individual entity must be coordinated
- Support of adjacent entities' subscriber units on a licensee's system will require reconfiguration of those subscriber units as part of the licensee's system
- Reliance on the overlapping coverage provided by adjacent jurisdictions systems for redundancy during periods of system failure, maintenance and overload

Timing of reconfiguring an adjacent agency can cause an impact to current operations and impact comparable facilities



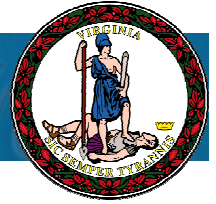
Rebanding Considerations



- Need to commit the time
- Do not rely on lawyers or consultants to always know the particulars about your system and region
- STA Sites – Currently the FCC and TA will not cover cost
- Know your Sprint/Nextel rep and the chain of command above – do not be afraid to escalate
- Will have a different Sprint/Nextel rep between PFA and FRA – expect some confusion
- Respond to RFI and Questions quickly



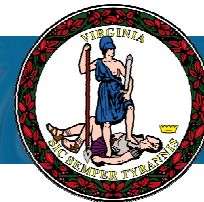
Rebanding Considerations



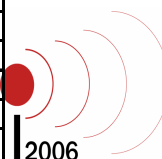
- Document your efforts – it will help during ADR
- Inform internal support agencies ahead of time
 - Legal
 - Purchasing
- A “Good” consultant to overlook the process does help
- Mediation helps both sides – be prepared
- Include NPSPAC Mutual Aide Channels if operating
- Do not forget to include your internal cost in all areas
 - Administration
 - Technician
 - Public Safety Personnel



Sample Internal Reconfig Cost



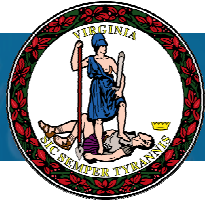
	Item	Time Per Item	Overtime Per Item	Travel Time Per Item	Setup/Take Down	Doc Per Item	Total Items	Per Hour Rate	Combined Time Cost
Subscriber Effort									
Radio Engineer	Subscriber	0.05	0	0.05	0	0	100	\$ 50.00	\$ 500.00
Radio Technician 1	Subscriber	0.15	0.1	0.05	0.1	0.1	50	\$ 25.00	\$ 687.50
Radio Technician 2	Subscriber	0.15	0.1	0.05	0.1	0.1	50	\$ 25.00	\$ 687.50
Police/Fire/EMS Officer	Subscriber	1		0.5			100	\$ 22.33	\$ 3,349.47
Subscriber Total		1.35	0.2	0.65	0.2	0.2		Subscriber Cost	\$ 5,224.47
Infrastructure Effort									
Radio Engineer	Data Gateway	1					1 sites	\$ 50.00	\$ 50.00
Radio Technician	Data Gateway	1			0.5	0.5	1 sites	\$ 25.00	\$ 50.00
Radio Engineer	Brand X Repeaters	2		1			3 sites	\$ 50.00	\$ 450.00
Radio Technician	Brand X Repeaters	2		1	1	1	3 sites	\$ 25.00	\$ 375.00
Radio Engineer	Brand Y Repeaters	2		1			3 sites	\$ 50.00	\$ 450.00
Radio Technician	Brand Y Repeaters	2		1	1	1	3 sites	\$ 25.00	\$ 375.00
Radio Engineer	Combiners	2		1			3 sites	\$ 50.00	\$ 450.00
Radio Technician	Combiners	2		1	1	1	3 sites	\$ 25.00	\$ 375.00
InfrastructureTime Total		14		6	3.5	3.5		Infrastructure Cost	\$ 2,575.00
Milage									
	Travel Units	Miles	Total Miles	Travel Costs					
Police/Fire/EMS	100	25	2500	\$ 975.00					
Communications			50	\$ 19.50					
				\$ 994.50					
Total Internal Rebanding Cost									\$ 8,793.97



2006
Virginia
Interoperable
Communications
Conference



800 MHz Rebanding



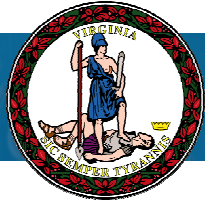
www.interoperability.virginia.gov



2006
Virginia
Interoperable
Communications
Conference



800 MHz Rebanding



Thank you

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